

IPA #13

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **56**
- SRM **30.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **550 liter(s)**
- Trub loss **5 %**
- Size with trub loss **583 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **622.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **455 liter(s)**
- Total mash volume **585 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	112.5 kg (85.9%)	81 %	4
Grain	Weyermann - Rye Malt	12.5 kg (9.5%)	81 %	7
Grain	Carafa III	5 kg (3.8%)	70 %	1400
Liquid Extract	Briess LME - Maltoferm A-6000 (Black Malt Extract)	1 kg (0.8%)	78 %	8350

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	500 g	60 min	15.8 %
Whirlpool	Galaxy	1000 g	15 min	15.8 %
Whirlpool	Chinook	1000 g	15 min	10.5 %